

Apply KAIZEN successfully

The structure defines the flexibility of a company

By Masaaki Imai

Why can humans walk upright and apes cannot, although the skeletons are similar? It is the differences in the bone structure, which allow us to walk in an upright position whilst the ape has to move forward on all fours. It is similar within a company: waste-free and flexible manufacturing without inventory is only possible if there are structures available.



Masaaki Imai, founder and chairman of the KAIZEN Institute

There are two types of production systems: the traditional production system, which is based on sales projections and manufactures in advance, and the lean production system, which only produces the

products which the customer wants to have at the time he wants to have them.

Production system as a cause of issues

Sales forecasts are never reliable. This applies today more than ever. In a globally competitive environment conditions are constantly changing. Companies, which manufacture according to the traditional production system cannot react in a flexible way to market changes. According to my estimates 99.9 % of companies around the world are stilling working with the traditional production system. The

management of these companies does not even recognize that the production system they are using is the cause of their problems. These include long throughput times, high inventory levels, high labor costs, quality issues and a lack of flexibility. The top management of such companies has to wake up and recognize that it has failed to introduce the "lean" production

system. "Lean" production is the only way to survive in the globally competitive world of the 21st century. "Lean" does not mean job cuts. On the contrary: only with waste-free and flexible production job security can be ensured long-term. 'Costs are obviously important. But there should be "cost management" instead of

Continued on page 2

TOPICS

The structure defines the flexibility of a company

Gemba – the most important place in the company

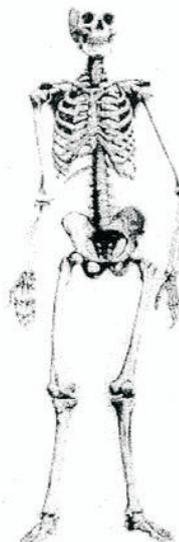
Reasons for success and failure on introducing KAIZEN

KAIZEN Diagnosis as orientation aid

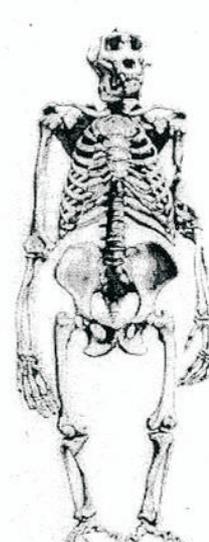
Report KAIZEN Congress Congress 2006 Zug

Structure defines mobility

Human skeleton: Lighter bone structure, suitable for the upright position.



Ape skeleton: Heavier bone structure, strong pelvic and shoulder areas. Suitable for moving on four legs.



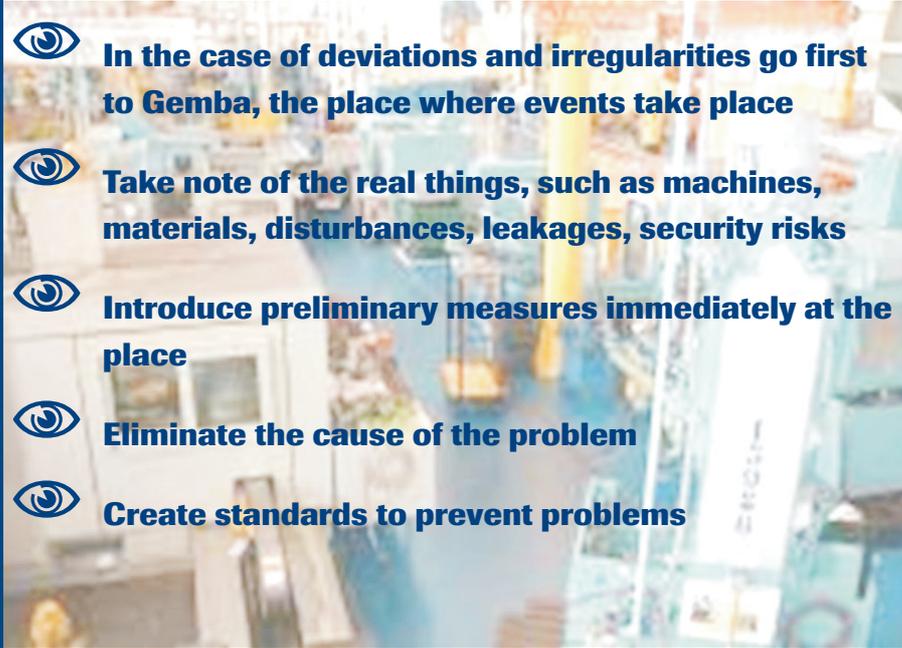
Continued from page 1

“cost cutting”. “Cost cutting” relates to job cuts and the purchase of cheaper materials. I understand “cost management” to involve the optimization of materials flow and the alignment and synchronization of production speed. This creates the basis for flexible and waste-free production within a cost-effective structure.

KAIZEN provides methods and tools to transform the company step by step into a “lean” organization. On introducing methods such as 5S, Kanban or One Piece Flow revolutionary changes cannot be achieved. These partly implemented measures represent a small portion of the much larger picture. Many believe that KAIZEN only allows small improvements to occur and that a great leap forward is not possible. But the cumulative effect of many small steps can be dramatic improvement from a strategic perspective. It is a long term project to change the bone structure of a company.

The KAIZEN philosophy can help towards that aim. Shorter throughput times, a minimal waste, less inventory and errors, arise from the change to a “lean” production system. Those who want to achieve success have to have stamina and discipline. KAIZEN works with simple methods. Common sense is the primary focus. It is important that top management declares KAIZEN as a

The five Gemba Principles



-  **In the case of deviations and irregularities go first to Gemba, the place where events take place**
-  **Take note of the real things, such as machines, materials, disturbances, leakages, security risks**
-  **Introduce preliminary measures immediately at the place**
-  **Eliminate the cause of the problem**
-  **Create standards to prevent problems**

corporate goal, completely supports it and encourages the workforce as well setting the targets in that direction. Decisions should not be made based on computer generated figures. Managers should always observe the real elements (Jap. Gembutsu) where they are taking place. That is where possible causes of problems can be found.

“Gemba is there where the corpse is found”

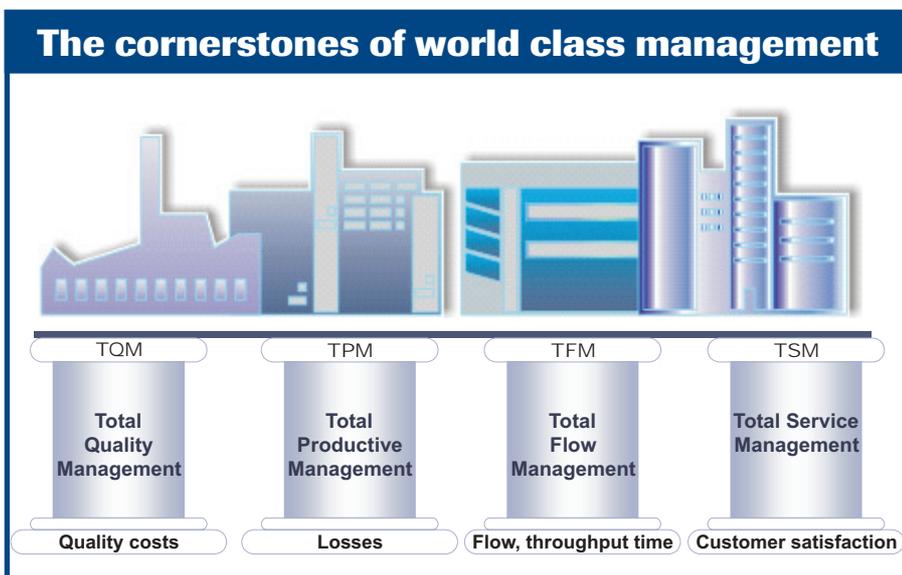
In Japanese “Gemba” means the place where events take place. We consider Gemba to be the holiest place in the

company. This is where managers should spend most of their time because this is the place where the most value is added. Problems and irregularities can only be analyzed and eliminated at Gemba, not from the desk. Gemba is there where the corpse is found! Or have you seen that Detective Columbo solved a murder case from his desk?

The four cornerstones for a world class production system (see diagram on the left) can be set up with KAIZEN methods. See problems as opportunities and let the “KAIZEN spirit” pervade all areas of the company.

The idea has to come from top management. The philosophy then cascades down like a waterfall. At the same time some KAIZEN methods are suitable for encouraging the KAIZEN process in a bottom-up way. These include 5S, standardization, improvement ideas, and the waste hunt.

Current information under:
www.kaizen.com. ■



Elimination of errors

Stumbling blocks, do's and don'ts in the KAIZEN process

Toyota is a classic example to show the opportunities for success in applying the KAIZEN philosophy. Countless managers have tried over the last two decades to improve their company situation with KAIZEN methods. Some were successful and some failed. Here is an overview of some of the reasons for success and failure with KAIZEN methods:

Management does not really support it:

Efforts will only be successfully rewarded if top management and all other managers drive the improvement process.

Lack of objectives:

Clear objective setting with schedules and regular monitoring of fulfillment in the form of an audit dictates the direction.

The corporate goals need to be granulated down into divisional goals and goals for the individual employees. Clear communication of the goals serves to motivate and guide staff.

Employees do not know the methods:

Training is very important in the improvement process. Only those who know methods can eliminate the source

Support from the top: Require, enable, empower



KAIZEN only works if management is committed to the philosophy. "Drive and encourage" is the motto. Competency in methodology is the necessary prerequisite for the successful implementation and continuation of the KAIZEN process. KAIZEN managers and process managers are the driving factors on site who coordinate the improvement process and transfer their knowledge of the methods. Clear objective setting and timelines and monitoring with audits are additional elements for sustained success.

of problems. Process managers are able to train colleagues and make the methodology known to a broader base.

Short term attitude:

There are no "quick wins" with KAIZEN and it is not suitable for restructuring companies.

The best way is to start whilst resources are still there. But the great steps take

effect in the mid-term, after about 5 years.

Copy or understand?:

It is not sufficient to simply copy the way in which other companies, such as Toyota, implement. Every company needs individual measures.

The KAIZEN diagnosis (see page 4) is suitable for determining the right measures.

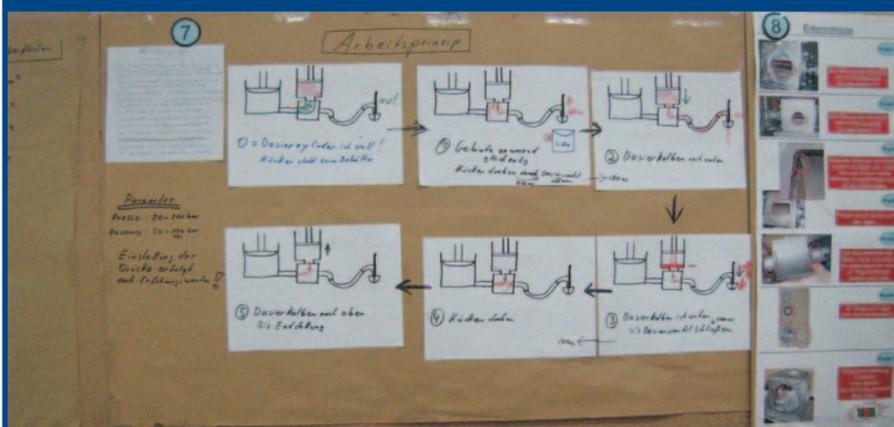
Management not at Gemba:

Management decisions should be made in the light of the real situation and not on the basis of computer lists. What is really happening can only be observed in the place where events take place (see page 2).

No objective criteria for the quality of the production system:

The financial situation of the company is evaluated and determined on the basis of the balance sheet. Management is measured by it. But objective criteria are missing for the evaluation of the production system quality. These measuring criteria still have to be developed. ■

Use common sense!



It does not always have to be charts from the computer. Keeping your eyes open on site, a few handwritten drawings and the questioning technique '5 times why?' usually help in finding out the cause of the problem and consistently improving the situation.

KAIZEN Diagnosis as orientation aid



Where is your production system? With the KAIZEN Management Audit we provide you with a diagnostic tool which shows where there is an acute need for action.

Our consultants go with management to Gemba to evaluate the situation. Together a roadmap is generated which shows the way to waste-free working.

The entire value flow – from administration to delivery – is observed.

We show you possibilities and you decide on the goals and focus.

College

Get the expertise for TPM[®], Total Service Management, Value Stream Design and Total Flow Management.

Train later to become a KAIZEN Manager.

Learn from the best on our benchmark tour.

More information, dates and prices are available on our service hotline:

+41 41 725 42 84

KAIZEN Congress 2006 in Zug

The Lean Offensive

Being “lean” – that should be the aim of all companies. But that does not mean job cuts. It means getting rid of inventory and it means flexible production with short throughput times. Masaaki Imai emphasized that in his presentation at the Kaizen Congress which was held in Zug by the Management Circle. KAIZEN is often translated with “continuous improvement”. But that is not enough for the KAIZEN guru from Japan. For him KAIZEN means improvement every day, everywhere and for everyone.



Happy faces after a successful event: Udo Reimer, Masaaki Imai, and Christian Bartholomay at the KAIZEN Congress in Zug.



Operations Manager Hans Rickenbacher (right) leads a group of visitors through the TRUMPF works in Baar/CH.

That means that the entire value chain from top management to suppliers is involved. The best practice experts showed examples of how they have successfully paved their way to the “lean production” and the “lean office”. The highlight of the congress was the two works tours which were conducted in parallel. At the Sika Schweiz AG in Zurich it was possible to see the advanced implementation of the 5S principles. The visitors to TRUMPF Maschinen AG in Baar were able to see TRUMPF's own SYNCHRO production system, which works in a process oriented way. The next KAIZEN Congress will take place from 27th-29th November, 2007 in Munich.

Information under www.kaizen.com. ■

Preview

New book by Masaaki Imai to be published in 2007

Masaaki Imai has captured much attention in the last 20 years with his bestsellers “KAIZEN” and “Gemba KAIZEN”. Many companies have since got involved with KAIZEN. But only a few are really successful.

Masaaki Imai has also accompanied many companies on their way to KAIZEN. In his next book he addresses these experiences and outlines how a production system can be successfully transformed with KAIZEN methods. The new book is due to be published at the end of 2007. ■

IMPRINT

Publisher:



KAIZEN[®]
INSTITUTE

KAIZEN Teaching AG
Bahnhofplatz
6300 Zug, Switzerland
Tel. +41 41 7 25 42 - 80
Fax +41 41 7 25 42 - 89
info@kaizen.com
Editorial: Sabine Leikep